

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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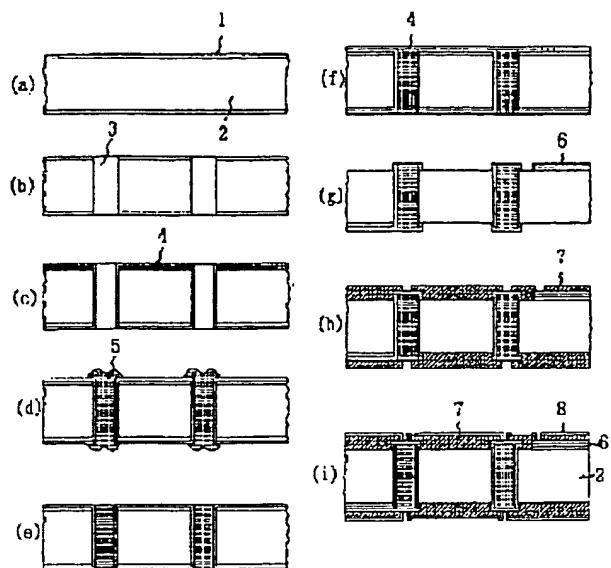
APPLICATION DATE : 13-04-93  
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INVENTOR : SHIMAMOTO TOSHIJI;

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TITLE : MULTILAYER CIRCUIT BOARD AND ITS MANUFACTURE



**ABSTRACT :** PURPOSE: To form a high-density wiring pattern with highly reliable through holes by forming a first wiring pattern on the smoothed surface of a conductive layer containing the through holes.

**CONSTITUTION:** The circuit board uses a copper-clad glass epoxy laminated board as an insulating substrate 2 having conductive layers 1 on both surfaces and, after forming through holes 3 with a drill, plated-copper layers 4 are formed on the internal surfaces of the holes 3 and entire surface of the substrate 2 by electroplating after performing electroless plating. The layers 4 are formed by the electroless plating and electroplating after the holes 3 with the layers 4 are filled with a thermosetting solder resist as a curable insulating resin 5 and the resin 5 is hardened and the surface of the conductive layers 4 containing the curable insulating resin is polished by successively using a No.320 and No.600 buffs. In this multilayer circuit board, therefore, a second wiring pattern 8 can be formed on a first wiring pattern 6 with an insulating layer 7 in between at a high wiring density and with high reliability.

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